ACCOUNTING UNDER CONDITIONS OF CHANGING PRICES FROM THE DEBTOR AND CREDITOR VIEWPOINT

BY

EUGENE LOUIS ZIEHA

B.S. in C., St. Louis University, 1946
M.S. in C., St. Louis University, 1948

AN ABSTRACT OF A THESIS

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN ACCOUNTANCY
IN THE GRADUATE COLLEGE OF THE
UNIVERSITY OF ILLINOIS, 1952

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The Problem

During each period of rapidly changing prices there is much discussion concerning the merits of basing, or not basing, accounting computations on historical cost. Many eminent accountants and users of accounting data seriously question the validity of results obtained by the use of currently approved methods. They call for changes in accounting procedure which will, in their opinion, compensate for the instability of the dollar, the medium of accounting expression. Their suggestions meet with considerable opposition from other people, also a numerous and prominent group, who defend the currently used idea of original cost as the basis for the pricing of accounting transactions.

The general problem introduced into accounting by the tendency of the monetary unit, in our case the dollar, to undergo almost constant changes in meaning is extremely broad and complicated. Despite the voluminous discussion of its many facets that appears in the professional literature and the sizeable amount of attention that has been given it by accounting organizations, a complete solution to the problem of accounting expression under conditions of changing prices does not seem likely to be forthcoming in the immediate future. The problem is thus a continuing one and, therefore, tends to detract from the confidence placed in information presented by accountants.

The breadth of the serious accounting problem and the diversity of opinion and motivation among those who deal with it make impossible a complete coverage of all its ramifications in a single research paper. However, there are many aspects of the overall problem that, although they are fre-

quently neglected in the current discussions of accounting under conditions of changing prices, appear worthy of additional study. In many cases these deal with basic ideas that are often ignored by the critics of current methods in their attempts to reach a quick solution to outward manifestations of the problem. It is one of these fundamental, but neglected, ideas which is investigated here.

Inherent in the discussions of the price level problem, but seldom approached directly, is the question of the relative position of the various types of equity holders. Yet any consideration of accounting procedure must give attention to the effect of the method followed upon the claims of those who supply the capital used in business operations. While most of the controversy regarding the validity of accounting reports based on historical cost figures pertains to questions of income determination and asset valuation, it must be remembered that these accounting computations are made primarily for the benefit of those who invest their funds in business corporations. Therefore, it seems advisable to investigate the overall problem of accounting under conditions of changing prices from the viewpoint of these corporate investors.

Corporate equity holders enter into a variety of debtor and creditor relationships as they take part in the financing of business enterprises. The method of accounting followed by the company in which these debt relationships exist has a major effect upon the interests of the parties concerned. Therefore, a study of accounting under conditions of changing prices from the viewpoint of the debtors and creditors who finance business operations was undertaken. Special attention was given to the possible effects of the acceptance of the many proposals for change in accounting methods upon the parties to these financial transactions.

The Investigation of the Problem

In order to investigate the accounting problem from the viewpoint of the parties who finance business activities, a

preliminary study was made of debtors and creditors and the relationship into which they enter. This part of the work was entirely outside the confines of accounting, although the accounting problem was constantly in mind as it was undertaken. In the thesis this non-accounting material was presented in four appendixes with many of the ideas contained therein being specifically applied to the accounting problem in the main body of the investigation. The paragraphs immediately following contain a brief indication of the tenor of this part of the work.

The first of the four appendixes deals with parties who enter into debt contracts under simple conditions. A debt transaction requires the existence of people who desire to borrow, either for present personal use or for productive purposes. Moreover, they must be able to convince prospective creditors of their intent and ability to repay when the debt comes due. On the other hand, there must be people who, because they have saved, are in a position to become creditors. They also must have a desire to enter into a debt transaction. The debt relationship must offer some advantages to both parties if it is to come about voluntarily. This point is very important in the consideration of any proposal to change accounting methods that would give undue advantage to one of the parties.

The effects of changes in the price level upon lenders and borrowers is then studied. These parties take part in debt transactions despite their awareness of the fact that prices change with the passage of time. Popular opinion holds that debtors gain and creditors lose as prices rise, but the actual effect of changing prices is frequently detrimental to both parties to the debt contract. A number of points in this section of the study lead to the conclusion that debtors and creditors have no logical reason to expect setttlement with the identical amount of general purchasing power that changed hands at the inception of the debt contract. This conclusion holds an important place in the subsequent appraisal of the demands for a change to a method of accounting that would

presumably compensate for fluctuations in the price level.

A study of the relationship of debtors and creditors in the corporate form of business organization is necessary because most accounting work is for incorporated businesses. Two groups of security holders, common stockholders and bondholders, are related in a dual manner. In addition to being fellow investors in the corporation, they are also debtors and creditors of one another with the corporation standing between them as an intermediary. This second relationship is in danger of being upset by a change in accounting methods that does not give full consideration to the interests of both groups.

Some thought is given to the effects of price changes upon corporations and their investors. The effects upon the corporations are not necessarily identical with the effects upon different classes of investors. There appears to be some identity of interest between corporations and their common stockholders that is not shared by the bondholders. This point is relevant to the study of accounting inasmuch as accounting problems are normally approached from the short-run viewpoint of corporations and their residual owners, the common stockholders. However, neglect of the bondholders' position is very likely to have detrimental effects upon the long-run financing of corporations.

The next major step in the investigation of the accounting problem was a comparison of the attention given debtors and creditors in accounting and the related fields of law, corporation finance and economics. The four areas contain a wide diversity of thought pertaining to debtors and creditors. The subject occupies an important place in law, finance and accounting, but holds an insignificant position in general economic theory.

Law provides a framework of contractual forms, procedures and percedents which are used by debtors and creditors as guides in the incurrence and settlement of their obligations to one another. Corporation finance deals with business debt from the viewpoint of business managements

faced with the problems of obtaining funds and settling claims in the process of their business enterprises. Accounting simply records from one party's viewpoint the quantitative relationship of debtors and creditors but in doing so has serious responsibilities toward those to whom it supplies business information.

The economist spends much time on subjects having an intimate connection with the debt relationship. Money and interest are two major topics in economics in which the existence of debtors and creditors is evident. However, little attention is given to the individuals who enter into the debt transactions. When debt is touched upon in economics, an aggregate viewpoint is usually taken. It appears that the economists feel that the details of this subject belong to some other field of study.

The comparison of the position of debtors and creditors in the various fields of study provides many ideas applicable to the question of accounting under conditions of changing prices. The first of these is that accountants must look to the field of law for guidance in some matters. It is furthermore likely that anyone who discusses the problems introduced into accounting by price changes must bear in mind the legal implications of the relationship of debtors and creidtors. The second important idea is that accountants must give careful attention to the needs of those engaged in the financing of corporations. The public accounting profession has taken a particular interest in the information requirements of individuals who invest their money in corporate securities. Those who attempt to solve the problem of accounting under conditions of changing prices must continue to recognize the financial aspects of accounting data.

The third idea indicates that accountants need not give very much attention to the ideas found in the field of economics when considering accounting problems that have a close connection with the relationship of debtors and creditors. Special attention must be given to this last point as many of those who

advocate a change from present accounting methods refer to economics as the source of ideas critical of accounting. Because accountants have certain responsibilities in connection with the relationship of debtors and creditors while the economists do not, some of the ideas held by the economists may not be transferable into the field of accounting. This does not imply an arbitrary rejection by accountants of ideas found in economics, but rather that accountants must test such ideas to determine if they are suitable for introduction into their discipline. One test is whether the acceptance of these ideas would have any detrimental effect on the position of individual debtors and creditors.

This conclusion should be specifically applied to the economists' concept of real capital and real income that is such a contrast to the accountants' monetary concept. Many critics of present accounting methods want to turn from the monetary basis by introducing replacement costs and purchasing power adjustments into accounting. On the basis of the reasoning above, two things must be called to their attention.

First, an idea that has gained a wide acceptance among economists does not thereby provide a basis for claiming that accountants are in error if they do not incorporate the idea in their methodology.

Second, before suggesting that some economic idea be introduced into accounting, they should, along with other tests that may be appropriate, inquire whether or not the suggestion would have any disrupting effects on the relationship of debtors and creditors.

The remainder of the thesis contains a comprehensive analysis of the many proposals to revise accounting methods that come forward during times of changing prices. These are appraised from the viewpoint of the debtors and creditors who finance corporate activities. The question is whether the suggested plans provide a logical substitute for the method of accounting now in use.

For purposes of analysis the wide variety of proposals for a change in accounting must be molded into one general plan. Two features are predominant in the proposals that are being made by the critics of the historical cost basis of account keeping. The first is that the replacement cost basis is inherent in the thinking of the advocates of accounting change. While it frequently is not acknowledged by name, the replacement viewpoint is recognizable in some form in all the proposed plans. The second important point is that the advocates of change intend for the replacement concept to be implemented in accounting practice by the introduction of index number adjustments into the accounts.

The acceptance of the accounting changes suggested by many critics, along with the acceptance of the replacement attitude that plays a major part in their reasoning, would be beneficial to business corporations and to their residual owners, the common stockholders. The question may well be asked whether the changes and the resulting benefits that would accrue to the common stockholders should be allowed to take place. An application of some of the ideas developed in the preliminary study of debtors and creditors results in a negative answer to this question.

In this analysis the common stockholders are at first looked upon as sole investors and as being in the position, to some extent, of creditors of the corporation. An attempt is made to determine if they deserve the maintenance by the corporation of the same amount of general purchasing power as they invested. A number of reasons lead to the conclusion that they have no logical reason to expect the maintenance or return of exactly the same amount of purchasing power as they invested. The subjective factors inherent in their investment indicate that stockholders do not have the same appraisal of the purchasing power they invest as would be made by an objective index. Furthermore, the corporation frequently does not receive the particular purchasing power the individual invests. The general impossibility of avoiding changes in physical assets with the passage of time points to a similar

impossibility of avoiding changes in the purchasing power of a capital fund. Likewise, the stockholders' actions often indicate that they either desire or help to bring about the price changes from which, we are told, they expect accountants to protect them.

Following this, the common stockholders are looked upon as being related to the bondholders. The common stockholders would obtain advantages at the expense of the bondholders if the replacement viewpoint were accepted and put into effect through the use of the proposed index number adjustments. During times of rising prices the idea of maintenance of the corporations' purchasing power would apply to all assets, but the bondholders would receive only the fixed sum indicated by their contracts. This would result in a gain on the part of the common stockholders resulting from maintenance of the purchasing power of the bondholders' investment. Yet, if the proposed changes are accepted, accountants would completely ignore profits or losses that accrue to the benefit of the common stockholders because of the companies' outstanding debts.

Business corporations are financed by the combined investments of stockholders and bondholders. The proposed changes in accounting methods would have adverse effects upon the relationship of the different classes of investors. While it is perfectly logical for common stockholders to attempt to improve their relative position, it is not the accountants' responsibility to provide them with these advantages by making over their own technology. The responsibilities of the accountants extend to all types of equity interests. Accountants should provide an objective reporting of the facts concerning debtors and creditors; they should not attempt to influence the conditions of their relationship.

In a continuation of this analysis the position of the common stockholders as compared to that of all other holders of wealth is considered. Most of the criticisms of accounting are related to price changes growing out of changes in the statutory monetary unit, especially the recent decrease in its value.

The proposed revisions of accounting methods appear to be an attempt to shift the effects of this monetary inflation to some other group in society. In light of the broad public responsibilities of the accounting profession, it is concluded that it is beyond the province of accountants to contribute to such an attempt.

Following this part of the analysis an attempt is made to determine if the legal relationship of debtors and creditors in the corporation contains any implications that have a bearing on the problem of accounting under conditions of changing prices. Many legal obstacles exist that tend to hamper any drastic changes in accounting methods. However, the existence of legal obstacles is not given so much attention as is the thought that is evident in the various legal aspects of the debt relationship.

A combination of legislative, executive and judicial actions in the early 1930's eliminated the enforceability of the gold clauses that formerly appeared in many bond contracts. This action provides an example of legal thought that must be given some consideration in the study of the problems of accounting under conditions of changing price levels.

In the "gold clause" cases the courts definitely took a legal tender viewpoint when dealing with debt. In each case they arrived at the number of contracted dollars as being the vital point in the settlement of the contract regardless of the change in the gold content of the dollars. Contracts expressed in terms of money were held to mean "legal tender" money. This is in contrast to the viewpoint of those who propose a change in accounting methods. They are interpreting some contracts that have been stated in terms of money as being subject to restatement in the accounts in terms of purchasing power. Where the court held that gold certificates are not warehouse receipts for a certain quantity of gold, it may be suggested that stock certificates are not warehouse receipts for a certain quantity of purchasing power and should not be restated on this basis in the accounts.

The terms of the contracts entered into by the security holders are given close attention. They indicate an attitude on the part of the parties who enter into them that stands as an obstacle to a radical departure from present accounting methods. The many legal tender contracts into which these parties enter imply the use of legal tender ideas throughout the accounting for their relationship.

All aspects of the treatment of corporate capital give an idea of a fund of dollars rather than a fund of purchasing power. For example, no specific attempt is made to obtain equal purchasing power in the case of subsequent sales of securities that give purchasers rights equivalent to those of the earlier purchasers of the securities.

In addition, many provisions included in the bond contracts and the preferred stock contracts require specific use of accounting for their performance. As the currently followed methods of accounting were in use at the time the securities were issued, it is likely that objections would be raised to a later change in accounting methods that would result in a change in the operation of the contracts. It also may be mentioned that litigation involving the various types of security contracts has resulted in the establishment of a certain amount of legal precedence pertaining to currently followed methods of accounting.

Another section points out that interpretation of dividend laws are in many cases dependent upon the use of accounting data. A change in accounting would reduce its value as a guide to the legality of dividends under some state laws. However, it is unlikely that a change in accounting methods would be allowed to affect the application of the statutory intention regarding dividends. The adoption of the proposed changes would introduce much confusion in this area to say the least.

It should be noted that there have been a number of recent changes in the dividend laws of the various states. The legislators surely have been aware of the changes in the purchasing power of the dollar that have been taking place.

Nevertheless, they have passed statutes that have results exactly opposite to those that would be achieved if the proposals of the critics of the currently used accounting methods were accepted. Do those who desire to change accounting actually want to change the dividend base? It seems that in many cases this would be necessary to carry out their intent. If so, the procedure should be to go to the legislators who make the statutes, rather than to the accountants who provide data necessary for applying the statutes.

The various legal implications of the problem indicate that the choice of the parties who enter into corporate security contracts and provide the statutes for the control of corporate activities is in favor of the historical cost basis of accounting. The advocates of accounting change, therefore, would need to overcome this established pattern before the accounting profession could accept their suggestions.

The Results of the Study

The investigation of the relationship between debtors and creditors and the application of the results thereof to this problem of accounting lead to a conclusion that the historical cost basis of asset presentation and income calculation should be retained by accountants. A number of preliminary conclusions supporting this belief are reviewed in the following paragraphs.

The first conclusion is that those who discuss the problem of accounting during times of changing prices must give full consideration to the importance of accounting data to the various classes of debtors and creditors who finance business enterprises and to their relationship within the corporation. A belief that this probably was the situation led to the investigation undertaken in this thesis. It became more and more evident as study continued that the responsibilities of accountants toward the parties to debt contracts could not be ignored. Much of the work of accountants is directed toward providing information for debtors and creditors who are related to one

another through the corporate form of business organization. The effectiveness of many of their debt contracts is dependent upon information supplied by accountants. Because of this close connection between accounting information and debt transactions, accountants must constantly keep in mind the effects changes in their methods may have upon debtors and creditors.

A second conclusion deals with the relationship of accounting and economics. Accounting concepts in many areas, especially those pertaining to income, are quite different from those found in economics. Yet some ideas taken from economics are frequently used as arguments in favor of drastic revisions in the method of accounting under conditions of changing price levels. An investigation of the attention given to debtors and creditors in the two fields of study indicated that concern with the needs of the parties to debt contracts played a very important part in accounting, while the problems of these individuals held a relatively insignificant position in economics. Because of their serious responsibilities toward debtors and creditors, accountants can feel free to reject ideas originating in economics if these ideas are in conflict with that part of accountants' responsibilities.

The third conclusion resulted from an application of ideas developed in this investigation of the relationship between debtors and creditors to the proposals being made by critics of accounting methods that index number adjustments should be included in the computation of business income. This analysis indicated that an acceptance of these proposals would provide unfair benefits for the common stockholders at the expense of other investors. The contemplated introduction of such a theory regarding asset replacement and purchasing power adjustments would result in a confusing disruption of the debtor and creditor relationships within the corporation. By this reasoning the conclusion was reached that proposals calling for a radical departure from the historical cost basis of accounting should be rejected.

A basis for further opposition to the proposed changes in accounting methods is provided by a consideration of some of the implications of the legal aspects of corporate debt contracts. The contracts into which they enter seem to indicate that investors in corporate securities have a legal tender concept of debt; such a concept logically carries over to the manner of accounting for their interests. In addition, the interpretation of many debt contracts and dividend statutes are dependent upon accounting data. Accountants must be careful that a change in their method of accounting does not result in a change in the interpretation of contracts. This would lead to much litigation and a tremendous loss of confidence in the work of public accountants. Finally, the existing legal relationships between debtors and creditors in the corporation implies a satisfaction with and a dependence upon the present methods of accounting.

On the basis of the above conclusions retention of the historical cost method of asset presentation and income calculation is clearly indicated. The smaller departures (LIFO, cost or market, etc.) may well be continued, though they should be recognized as true departures from basic concepts. In index number adjustments the departure from basic concepts goes so far and promises so many disturbing results that we should resist the introduction of these devices into ledger accounts or into financial statements wherever they threaten to replace or submerge historical cost.

VITA

Eugene Louis Zieha was born on March 9, 1920, in St. Louis, Missouri. After graduating from William Cullen McBride High School in 1937, he enrolled in the evening division of the School of Commerce and Finance of St. Louis University from which he received a Certificate in Commerce in June, 1941. During this time he was employed successively at Stix-Baer & Fuller and Fry-Fulton Lumber Company in accounting and clerical positions. In 1942 he enlisted in the Army of the United States and served in Africa and Italy. Upon discharge from the Army in the early fall of 1945 he returned to full-time studies at St. Louis University from which he received the degree of Bachelor of Science in Commerce, with honors, in August, 1946. In September of 1946 he entered the Graduate School of St. Louis University and received the degree of Master of Science in Commerce in June, 1948. In 1946 he was appointed to the faculty of St. Louis University, serving first as an assistant and later as an instructor in the Accounting Department. He entered the Graduate College of the University of Illinois in 1949, during which year he attended the summer session. He returned for the summer session of 1950 and since that time has been enrolled continuously at the University of Illinois. During the academic year 1950-51 he served as a part-time Assistant in Accountancy in the Department of Business Organization and Operation.